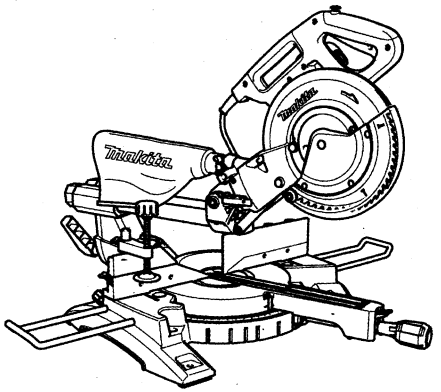
Makita Corporation Anjo, Aichi, Japan

JM23280030

Makita

Slide Compound Miter Saw

LS1018
LS1018L



010408

DOUBLE INSULATION

IMPORTANT: Read Before Using.

ENGLISH (Original instructions)

Contents

SPECIFICATIONS

Model	LS1018 / LS1018L
Blade diameter	255 mm - 260 mm
Hole diameter	
For all countries other than European countries	25.4 mm
For European countries	30 mm

Max. Cutting capacities (H x W) with 260 mm in diameter

Miter angle	Bevel angle		
	45° (left)	0°	45° (right)
0°	50 mm x 310 mm	91 mm x 310 mm	31 mm x 310 mm
45°	(left) 50 mm x 200 mm (right) 50 mm x 220 mm	91 mm x 220 mm	31 mm x 220 mm
60° (right)	-	91 mm x 153 mm	-

No load speed (min^{-1})	4,300
Laser Type (LS1018L only)	Red Laser 650 nm, <1mW (Laser Class 2)
Dimensions (L x W x H)	825 mm x 536 mm x 633 mm
Net weight	For all countries other than European countries.....19.8 kg
	For European countries.....19.9 kg
Safety class	/II

- Due to our continuing programme of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- Weight according to EPTA-Procedure 01/2003

END222-1

Symbols

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.

· Read instruction manual.

· DOUBLE INSULATION

· To avoid injury from flying debris, keep holding the saw head down, after making cuts, until the blade has come to a complete stop.

· When performing slide cut, first pull carriage fully and press down handle, then push carriage toward the guide fence.

· Do not place hand or fingers close to the blade.

· Adjust sliding fences clear of blade and blade guard properly.

· Always remove SUB-FENCE R when performing right bevel cuts. Failure to do so may cause serious injury to operator.

· Never look into the laser beam. Direct laser beam may injure your eyes.

· Only for EU countries

Do not dispose of electric equipment together with household waste material! In observance of European Directive 2002/96/EC on waste electric and electronic equipment and its implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

ENE006-1

Intended use

The tool is intended for accurate straight and miter cutting in wood. With appropriate saw blades, aluminum can also be sawed.

ENF002-1

Power supply

The tool should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply. They are double-insulated in accordance with European Standard and can, therefore, also be used from sockets without earth wire.

ENG015-2

For European countries only

Noise and Vibration

The typical A-weighted noise levels are
sound pressure level: 97 dB (A)
sound power level: 103 dB (A)
Uncertainty: 3 dB(A)

Wear ear protection.

The typical weighted root mean square acceleration value is not more than 2.5 m/s^2.
Uncertainty (K):1.5m/s^2
These values have been obtained according to EN61029.

ENH003-10

EC Declaration of Conformity

We Makita Corporation as the responsible manufacturer declare that the following Makita machine(s):

Designation of Machine:
Slide Compound Miter Saw

Model No./ Type: LS1018, LS1018L
are of series production and
Conforms to the following European Directives:
98/37/EC until 28th December 2009 and then with 2006/42/EC from 29th December 2009
And are manufactured in accordance with the following standards or standardised documents:
EN61029
The technical documentation is kept by our authorised representative in Europe who is:
Makita International Europe Ltd,
Michigan, Drive, Tongwell,
Milton Keynes, MK15 8JD, England

6th November 2009

000230

Tomoyasu Kato
Director
Makita Corporation
3-11-8, Sumiyoshi-cho,
Anjo, Aichi, JAPAN

ENA001-2

SAFETY INSTRUCTIONS

WARNING! When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

For safe operations:

1. **Keep work area clean.**
   Cluttered areas and benches invite injuries.
2. **Consider work area environment.**
   Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit. Do not use power tools where there is risk to cause fire or explosion.
3. **Guard against electric shock.**
   Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).
4. **Keep children away.**
   Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.
5. **Store idle tools.**
   When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.
6. **Do not force the tool.**
   It will do the job better and safer at the rate for which it was intended.
7. **Use the right tool.**
   Do not force small tools or attachments to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example, do not use circular saws to cut tree limbs or logs.
8. **Dress properly.**
   Do not wear loose clothing or jewellery, they can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protecting hair covering to contain long hair.
9. **Use safety glasses and hearing protection.**
   Also use face or dust mask if the cutting operation is dusty.

10. **Connect dust extraction equipment.**
If devices are provided for the connection of dust extraction and collection facilities ensure these are connected and properly used.
11. **Do not abuse the cord.**
Never carry the tool by the cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
12. **Secure work.**
Use clamps or a vice to hold the work. It is safer than using your hand and it frees both hands to operate the tool.
13. **Do not overreach.**
Keep proper footing and balance at all times.
14. **Maintain tools with care.**
Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories. Inspect tool cord periodically and if damaged have it repaired by an authorized service facility. Inspect extension cords periodically and replace, if damaged. Keep handles dry, clean and free from oil and grease.
15. **Disconnect tools.**
When not in use, before servicing and when changing accessories such as blades, bits and cutters.
16. **Remove adjusting keys and wrenches.**
Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. **Avoid unintentional starting.**
Do not carry a plugged-in tool with a finger on the switch. Ensure switch is off when plugging in.
18. **Use outdoor extension leads.**
When tool is used outdoors, use only extension cords intended for outdoor use.
19. **Stay alert.**
Watch what you are doing. Use common sense. Do not operate tool when you are tired.
20. **Check damaged parts.**
Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.
21. **Warning.**
The use of any accessory or attachment, other than those recommended in this instruction manual or the catalog, may present a risk of personal injury.
22. **Have your tool repaired by a qualified person.**
This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

ENB034-5

ADDITIONAL SAFETY RULES FOR TOOL

1. **Wear eye protection.**
2. **Keep hands out of path of saw blade. Avoid contact with any coasting blade. It can still cause severe injury.**
3. **Do not operate saw without guards in place. Check blade guard for proper closing before each use. Do not operate saw if blade guard does not move freely and close instantly. Never clamp or tie the blade guard into the open position.**
4. **Do not perform any operation freehand.** The workpiece must be secured firmly against the turn base and guide fence with the vise during all operations. Never use your hand to secure the workpiece.
5. **Never reach around saw blade.**
6. **Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.**
7. **Unplug tool before changing blade or servicing.**
8. **Always secure all moving portions before carrying the tool.**
9. **Stopper pin which locks the cutter head down is for carrying and storage purposes only and not for any cutting operations.**
10. **Do not use the tool in the presence of flammable liquids or gases.**
11. **Check the blade carefully for cracks or damage before operation.**
Replace cracked or damaged blade immediately.
12. **Use only flanges specified for this tool.**
13. **Be careful not to damage the arbor, flanges (especially the installing surface) or bolt. Damage to these parts could result in blade breakage.**

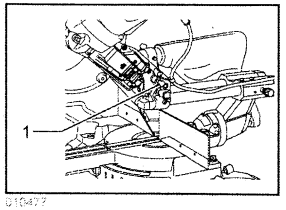
14. **Make sure that the turn base is properly secured so it will not move during operation.**
15. **For your safety, remove the chips, small pieces, etc. from the table top before operation.**
16. **Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.**
17. **Make sure the shaft lock is released before the switch is turned on.**
18. **Be sure that the blade does not contact the turn base in the lowest position.**
19. **Hold the handle firmly. Be aware that the saw moves up or down slightly during start-up and stopping.**
20. **Make sure the blade is not contacting the workpiece before the switch is turned on.**
21. **Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.**
22. **Wait until the blade attains full speed before cutting.**
23. **Stop operation immediately if you notice anything abnormal.**
24. **Do not attempt to lock the trigger in the on position.**
25. **Be alert at all times, especially during repetitive, monotonous operations. Do not be lulled into a false sense of security. Blades are extremely unforgiving.**
26. **Always use accessories recommended in this manual. Use of improper accessories such as abrasive wheels may cause an injury.**
27. **Do not use the saw to cut other than wood, aluminum or similar materials.**
28. **Connect miter saws to a dust collecting device when sawing.**
29. **Select saw blades in relation to the material to be cut.**
30. **Take care when slotting.**
31. **Replace the kerf board when worn.**
32. **Do not use saw blades manufactured from high speed steel.**
33. **Some dust created from operation contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**
    - **lead from lead-based-painted material and,**
    - **arsenic and chromium from chemically-treated lumber.**

    Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
34. **To reduce the emitted noise, always be sure that the blade is sharp and clean.**
35. **The operator is adequately trained in the use, adjustment and operation of the machine.**
36. **Use correctly sharpened saw blades. Observe the maximum speed marked on the saw blade.**
37. **Refrain from removing any cut-offs or other parts of the workpiece from the cutting area whilst the tool is running and the saw head is not in the rest position.**
38. **Use only saw blades recommended by the manufacturer which conform to EN847-1.**
39. **Wear gloves for handling saw blade (saw blades shall be carried in a holder wherever practicable) and rough material.**
40. **When fitted with laser, no exchange with different type of laser is permitted. Repairs shall only be carried out correctly.**

SAVE THESE INSTRUCTIONS.

INSTALLATION

Bench mounting



1. Stopper pin

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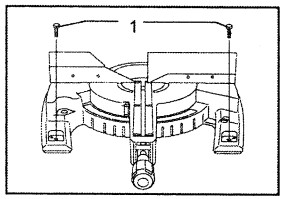
When the tool is shipped, the handle is locked in the lowered position by the stopper pin. Release the stopper pin by lowering the handle slightly and pulling the stopper pin.



1. Bolt

010229

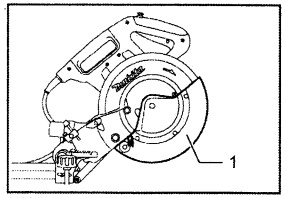
This tool should be bolted with four bolts to a level and stable surface using the bolt holes provided in the tool's base. This will help prevent tipping and possible injury.

FUNCTIONAL DESCRIPTION

⚠CAUTION:

- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Blade guard



1. Blade guard

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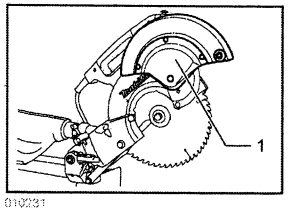
When lowering the handle, the blade guard rises automatically. The blade guard returns to its original position when the cut is completed and the handle is raised. NEVER DEFEAT OR REMOVE THE BLADE GUARD OR THE SPRING WHICH ATTACHES TO THE GUARD.

In the interest of your personal safety, always maintain the blade guard in good condition. Any irregular operation of the blade guard should be corrected immediately. Check to assure spring loaded return action of guard. NEVER USE THE TOOL IF THE BLADE GUARD OR SPRING ARE DAMAGED, FAULTY OR REMOVED. DOING SO IS HIGHLY DANGEROUS AND CAN CAUSE SERIOUS PERSONAL INJURY.

If the see-through blade guard becomes dirty, or sawdust adheres to it in such a way that the blade and/or workpiece is no longer easily visible, unplug the saw and clean the guard carefully with a damp cloth. Do not use solvents or any petroleum-based cleaners on the plastic guard.

If the blade guard is especially dirty and vision through the guard is impaired, use the supplied socket wrench to loosen the hex bolt holding the center cover. Loosen the hex bolt by turning it counterclockwise and raise the blade guard and center cover.

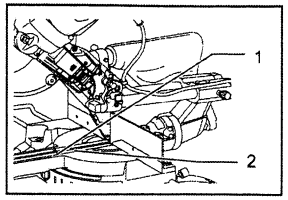


1. Blade guard

010231

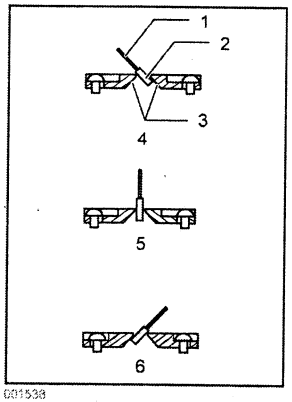
With the blade guard so positioned, cleaning can be more completely and efficiently accomplished. When cleaning is complete, reverse procedure above and secure bolt. Do not remove spring holding blade guard. If guard becomes discolored through age or UV light exposure, contact a Makita service center for a new guard. DO NOT DEFEAT OR REMOVE GUARD.

Positioning kerf board



1. Screw
2. Kerf board

010297



1. Saw blade
2. Blade teeth
3. Kerf board
4. Left bevel cut
5. Straight cut
6. Right bevel cut

001538

This tool is provided with the kerf boards in the turn base to minimize tearing on the exit side of a cut. The kerf boards are factory adjusted so that the saw blade does not contact the kerf boards. Before use, adjust the kerf boards as follows:

First, unplug the tool. Loosen all the screws (3 each on left and right) securing the kerf boards. Re-tighten them only to the extent that the kerf boards can still be easily moved by hand. Lower the handle fully and push in the stopper pin to lock the handle in the lowered position. Loosen the screw which secures the slide poles. Pull the carriage toward you fully. Adjust the kerf boards so that the kerf boards just contact the sides of the blade teeth. Tighten the front screws (do not tighten firmly). Push the carriage toward the guide fence fully and adjust the kerf boards so that the kerf boards just contact the sides of blade teeth. Tighten the rear screws (do not tighten firmly).

After adjusting the kerf boards, release the stopper pin and raise the handle. Then tighten all the screws securely.

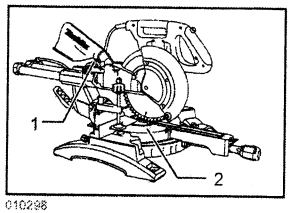
⚠CAUTION:

- Before and after changing the bevel angle, always adjust the kerf boards as described above.

Maintaining maximum cutting capacity

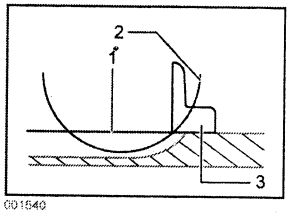
Unplug the tool before any adjustment is attempted. This tool is factory adjusted to provide the maximum cutting capacity for a 255 mm saw blade.

When installing a new blade, always check the lower limit position of the blade and if necessary, adjust it as follows:



1. Adjusting bolt
2. Turn base

010298



1. Top surface of turn base
2. Periphery of blade
3. Guide fence

001540

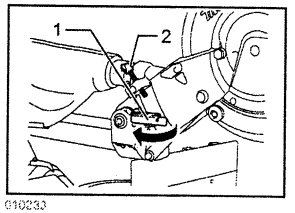
First, unplug the tool. Push the carriage toward the guide fence fully and lower the handle completely. Use the hex. wrench to turn the adjusting bolt until the periphery of the blade extends slightly below the top surface of the turn base at the point where the front face of the guide fence meets the top surface of the turn base.

With the tool unplugged, rotate the blade by hand while holding the handle all the way down to be sure that the blade does not contact any part of the lower base. Re-adjust slightly, if necessary.

⚠CAUTION:

- After installing a new blade, always be sure that the blade does not contact any part of the lower base when the handle is lowered completely. Always do this with the tool unplugged.

Stopper arm

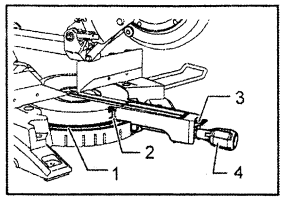


1. Stopper arm
2. Adjusting screw

010233

The lower limit position of the blade can be easily adjusted with the stopper arm. To adjust it, move the stopper arm in the direction of the arrow as shown in the figure. Adjust the adjusting screw so that the blade stops at the desired position when lowering the handle fully.

Adjusting the miter angle



1. Miter scale
2. Pointer
3. Lock lever
4. Grip

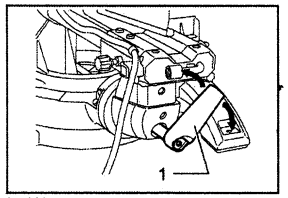
010409

Loosen the grip by turning counterclockwise. Turn the turn base while pressing down the lock lever. When you have moved the grip to the position where the pointer points to the desired angle on the miter scale, securely tighten the grip clockwise.

⚠CAUTION:

- When turning the turn base, be sure to raise the handle fully.
- After changing the miter angle, always secure the turn base by tightening the grip firmly.

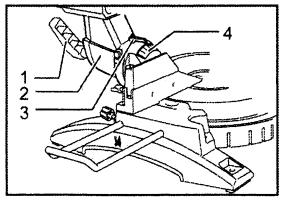
Adjusting the bevel angle



1. Lever

010236

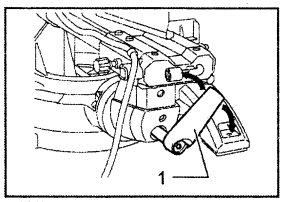
To adjust the bevel angle, loosen the lever at the rear of the tool counterclockwise. Unlock the arm by pushing the handle somewhat strongly in the direction that you intend to tilt the saw blade.



1. Lever
2. Arm
3. Pointer
4. Bevel scale

010235

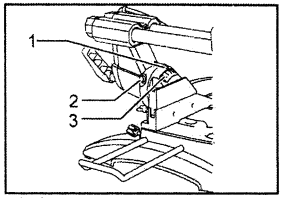
Tilt the saw blade until the pointer points to the desired angle on the bevel scale. Then tighten the lever clockwise firmly to secure the arm.



1. Lever

010236

When tilting the carriage to the right, tilt the carriage to the left slightly after loosening the lever and press the releasing button. With the releasing button being pressed, tilt the carriage to the right.



1. Pointer
2. Release button
3. Bevel scale

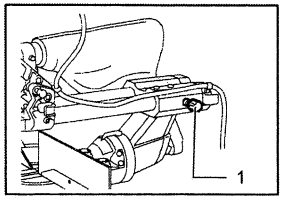
010430

Tilt the saw blade until the pointer points to the desired angle on the bevel scale. Then tighten the lever clockwise firmly to secure the arm.

⚠CAUTION:

- When tilting the saw blade, be sure to raise the handle fully.
- After changing the bevel angle, always secure the arm by tightening the lever clockwise.
- When changing bevel angles, be sure to position the kerf boards appropriately as explained in the "Positioning kerf boards" section.

Slide lock adjustment



1. Locking screw

010431

To lock the slide pole, turn the locking screw clockwise.

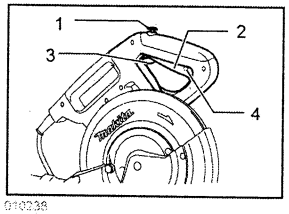
Switch action

⚠CAUTION:

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

- Do not pull the switch trigger hard without pressing in the lock-off button. This can cause switch breakage.

For European countries



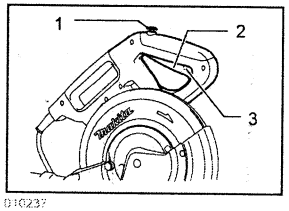
1. Lock-off button
2. Switch trigger
3. Lever
4. Hole for padlock

010238

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided. To start the tool, push the lever to the left, press in the lock-off button and then pull the switch trigger. Release the switch trigger to stop.

A hole is provided in the switch trigger for insertion of padlock to lock the tool off.

For all countries other than European countries



1. Lock-off button
2. Switch trigger
3. Hole for padlock

010237

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided. To start the tool, press in the lock-off button and pull the switch trigger. Release the switch trigger to stop.

A hole is provided in the switch trigger for insertion of padlock to lock the tool off.

⚠WARNING:

- Do not use a lock with a shank or cable any smaller than 6.35 mm in diameter.
- NEVER use tool without a fully operative switch trigger. Any tool with an inoperative switch is HIGHLY DANGEROUS and must be repaired before further usage.
- For your safety, this tool is equipped with a lock-off button which prevents the tool from unintended starting. NEVER use the tool if it runs when you simply pull the switch trigger without pressing the lock-off button. Return tool to a Makita service center for proper repairs BEFORE further usage.
- NEVER tape down or defeat purpose and function of lock-off button.

Electronic function

Soft start feature

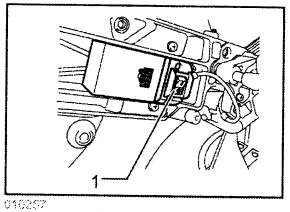
- Soft start because of suppressed starting shock.

Laser beam action

For model LS1018L only

⚠CAUTION:

- When not in use, be sure to turn off the laser



1. Switch for laser

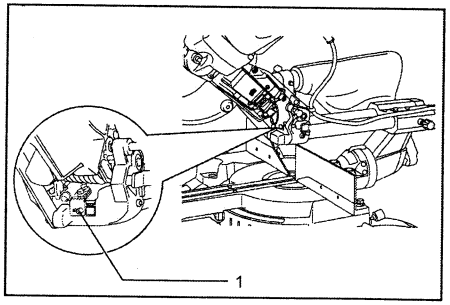
010257

⚠CAUTION:

- Never look into the laser beam. Direct laser beam may injure your eyes.
- LASER RADIATION, DO NOT STARE INTO THE BEAM, CLASS 2 LASER PRODUCT.
- Before shifting the laser line or performing maintenance adjustment, be sure to unplug the tool.

To turn on the laser beam, press the upper position (I) of the switch. Press the lower position (O) to turn off.

Laser line can be shifted to either the left or right side of the saw blade by loosening the screw holding the laser unit box and shifting it in the desired direction. After shifting, be sure to tighten the screw.



1. Screw holding the laser unit box

010473

Laser line is factory adjusted so that it is positioned within 1 mm from the side surface of the blade (cutting position).

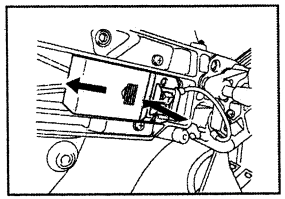
Cleaning of the lens for the laser light

If the lens for the laser light becomes dirty, or sawdust adheres to it in such a way that the laser line is no longer easily visible, unplug the saw and remove and clean the lens for the laser light carefully with a damp, soft cloth. Do not use solvents or any petroleum-based cleaners on the lens.

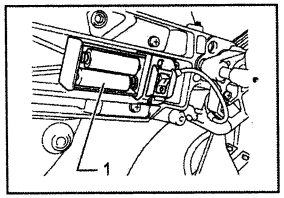
NOTE:

- When laser line is dim and almost or entirely invisible because of the direct sunlight in the indoor or outdoor window-by work, relocate the work area to a place not exposed to the direct sunlight.

Replacing the dry cells for laser unit



010259



1. Dry cell

010258

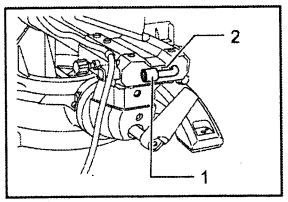
Remove the lid for the dry cells for laser unit by sliding while pressing it. Take out the old dry cells and put the new ones as shown in the figure. After replacing, return the lid to cover it.

ASSEMBLY

⚠CAUTION:

- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Storage of socket wrench with hex wrench on its other end



1. Socket wrench with hex wrench on its other end
2. Wrench holder

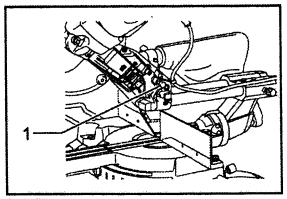
010240

The socket wrench is stored as shown in the figure. When using the socket wrench, pull it out of the wrench holder. After using the socket wrench, return it to the wrench holder.

Installing or removing saw blade

⚠CAUTION:

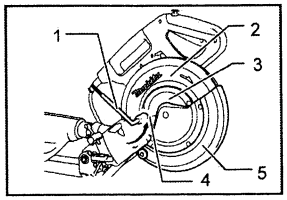
- Always be sure that the tool is switched off and unplugged before installing or removing the blade.
- Use only the Makita socket wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause an injury.



1. Stopper pin

010277

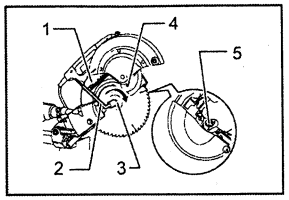
Lock the handle in the raised position by pushing in the stopper pin.



1. Socket wrench
2. Blade case
3. Center cover
4. Hex bolt
5. Blade guard

010241

To remove the blade, use the socket wrench to loosen the hex bolt holding the center cover by turning it counterclockwise. Raise the blade guard and center cover.



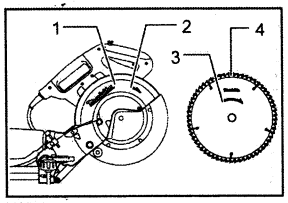
1. Blade case
2. Socket wrench
3. Hex bolt
4. Arrow
5. Shaft lock

010242

Press the shaft lock to lock the spindle and use the socket wrench to loosen the hex bolt clockwise. Then remove the hex bolt, outer flange and blade.

NOTE:

- When inner flange is removed mistakenly, be sure to install it on the spindle with its protrusion facing the spindle.



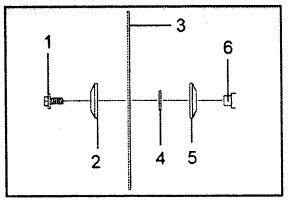
1. Blade case
2. Arrow
3. Arrow
4. Saw blade

010244

To install the blade, mount it carefully onto the spindle, making sure that the direction of the arrow on the surface of the blade matches the direction of the arrow on the blade case.

Install the outer flange and hex bolt, and then use the socket wrench to tighten the hex bolt (left-handed) securely counterclockwise while pressing the shaft lock.

For all countries other than European countries



1. Hex bolt (left-handed)
2. Outer flange
3. Saw blade
4. Ring
5. Inner flange
6. Spindle

010243

⚠CAUTION:

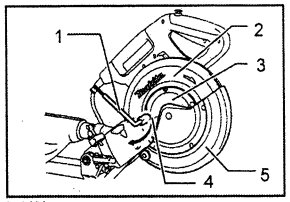
- The black ring 25 mm in outer diameter and the silver ring 25.4 mm in outer diameter are factory-installed as shown in the figure. When using a blade with 25 mm hole diameter, replace the silver ring with the black ring. Before mounting the blade onto the spindle, always be sure that the correct ring for the arbor hole of the blade you intend to use is installed between the inner and outer flanges.

For European countries

⚠CAUTION:

- The ring 30 mm in outer diameter is factory-installed between the inner and outer flanges.

Install the outer flange and hex bolt, and then use the socket wrench to tighten the hex bolt securely counterclockwise while pressing the shaft lock.

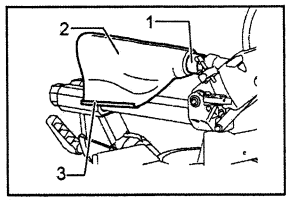


1. Socket wrench
2. Blade case
3. Center cover
4. Hex bolt
5. Blade guard

010562

Return the blade guard and center cover to its original position. Then tighten the hex bolt clockwise to secure the center cover. Release the handle from the raised position by pulling the stopper pin. Lower the handle to make sure that the blade guard moves properly. Make sure shaft lock has released spindle before making cut.

Dust bag (accessory)



1. Dust nozzle
2. Dust bag
3. Fastener

010245

The use of the dust bag makes cutting operations clean and dust collection easy. To attach the dust bag, fit it onto the dust nozzle.

When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag of its contents, tapping it lightly so as to remove particles adhering to the insides which might hamper further collection.

NOTE:

If you connect a vacuum cleaner to your saw, more efficient and cleaner operations can be performed.

Securing workpiece

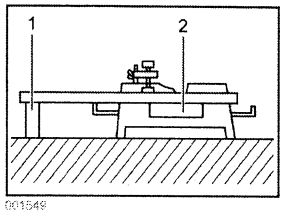
⚠WARNING:

- It is extremely important to always secure the workpiece properly and tightly with the vise. Failure to do so can cause the tool to be damaged and/or the workpiece to be destroyed. PERSONAL

INJURY MAY ALSO RESULT. Also, after a cutting operation, DO NOT raise the blade until the blade has come to a complete stop.

⚠CAUTION:

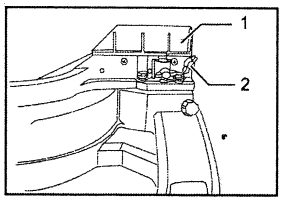
- When cutting long workpieces, use supports that are as high as the top surface level of the turn base. Do not rely solely on the vertical vise and/or horizontal vise to secure the workpiece.
  Thin material tends to sag. Support workpiece over its entire length to avoid blade pinch and possible KICKBACK.



1. Support
2. Turn base

001549

Sliding fence adjustment

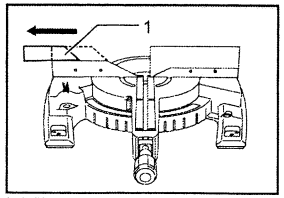


1. Sliding fence
2. Clamping screw

010480

⚠WARNING:

- Before operating the tool, make sure that the sliding fence is secured firmly.
- Before bevel-cutting, make sure that no part of the tool contacts the sliding fence when lowering and raising the handle fully at any position and pulling or pushing the carriage all the way at the lowest position..



1. Sliding fence

010472

⚠CAUTION:

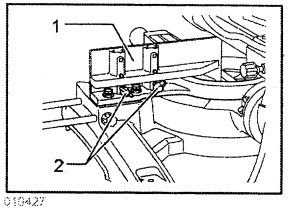
- When performing bevel cuts, slide the sliding fence to the left and secure it as shown in the figure. Otherwise, it will contact the blade or a part of the tool, causing possible serious injury to the operator.

This tool is equipped with the sliding fence which should ordinarily be positioned as shown in the figure.
However, when performing left bevel cuts, set it to the left position as shown in the figure if the tool head contacts it.
When bevel-cutting operations are complete, don't forget to return the sliding fence to the original position and secure it by firmly tightening the clamping screw.

Sub-fence R

⚠WARNING:

- Before operating the tool, make sure that the sub-fence R is secured firmly.
- Before performing right bevel cuts, remove the sub-fence R. It will contact the blade or a part of the tool, causing possible serious injury to the operator.

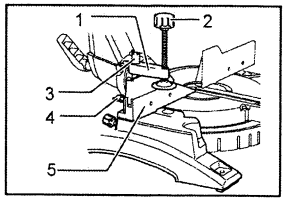


1. Sub-fence R
2. Screws

010427

The sub-fence R can be removed from the right side of the guide fence. To remove the sub-fence R, loosen the screw which secures the sub-fence R and pull it out. Follow the removal procedure in reverse to install it.
When bevel-cutting operations are complete, don't forget to return the sub-fence R to the original position and secure it by firmly tightening the clamping screw.

Vertical vise



1. Vise arm
2. Vise knob
3. Vise rod
4. Screw
5. Guide fence

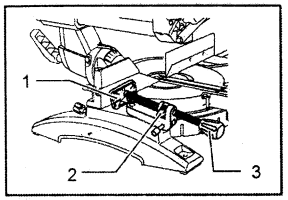
010393

The vertical vise can be installed on either the left or right side of the guide fence. Insert the vise rod into the hole in the guide fence and tighten the screw on the back of the guide fence to secure the vise rod.
Position the vise arm according to the thickness and shape of the workpiece and secure the vise arm by tightening the screw. If the screw to secure the vise arm contacts the guide fence, install the screw on the opposite side of vise arm. Make sure that no part of the tool contacts the vise when lowering the handle fully and pulling or pushing the carriage all the way. If some part contacts the vise, re-position the vise.
Press the workpiece flat against the guide fence and the turn base. Position the workpiece at the desired cutting position and secure it firmly by tightening the vise knob.

⚠CAUTION:

- The workpiece must be secured firmly against the turn base and guide fence with the vise during all operations.

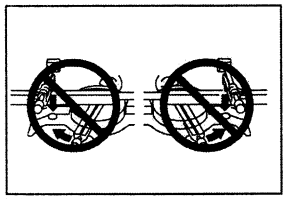
Horizontal vise (optional accessory)



1. Vise plate
2. Vise nut
3. Vise knob

010398

The horizontal vise can be installed in two positions on either the left or right side of the base. When performing 10° or greater miter cuts, install the horizontal vise on the side opposite the direction in which the turn base is to be turned.



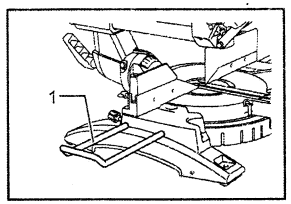
010232

By flipping the vise nut to the left, the vise is released, and rapidly moves in and out. To grip the workpiece, push the vise knob forward until the vise plate contacts the workpiece and flip the vise nut to the right. Then turn the vise knob clockwise to secure the workpiece.
The maximum width of workpiece which can be secured by the horizontal vise is 215 mm.
When installing the horizontal vise on the right side of the base, also use the sub-fence R to secure the workpiece more firmly. Refer to the "Sub-fence R" section described on previously for installing the sub-fence R.

⚠CAUTION:

- Always rotate the vise nut to the right fully when securing the workpiece. Failure to do so may result in insufficient securing of the workpiece. This could cause the workpiece to be thrown, cause damage to the blade or cause the loss of control, which can result in PERSONAL INJURY.
- When cutting out thin workpiece, such as base boards, against the fence, always use the horizontal vise.

Holders



1. Holder

010413

The holders can be installed on either side as a convenient means of holding workpieces horizontally. Slip fully the holder rods into the holes in the base. Then tighten the holders securely with the screws.

⚠CAUTION:

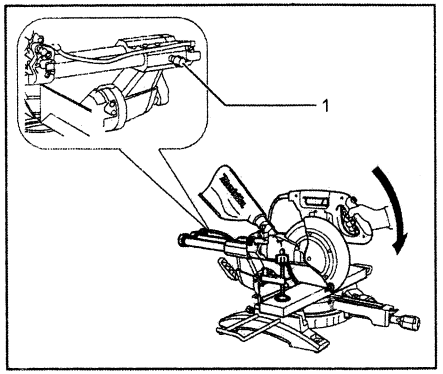
- Always support long workpieces level with the top surface of the turn base for accurate cuts and to prevent dangerous loss of control of the tool.

OPERATION

⚠CAUTION:

- Before use, be sure to release the handle from the lowered position by pulling the stopper pin.
- Make sure the blade is not contacting the workpiece, etc. before the switch is turned on.
- Do not apply excessive pressure on the handle when cutting. Too much force may result in overload of the motor and/or decreased cutting efficiency. Push down handle with only as much force as is necessary for smooth cutting and without significant decrease in blade speed.
- Gently press down the handle to perform the cut. If the handle is pressed down with force or if lateral force is applied, the blade will vibrate and leave a mark (saw mark) in the workpiece and the precision of the cut will be impaired.
- During a slide cut, gently push the carriage toward the guide fence without stopping. If the carriage movement is stopped during the cut, a mark will be left in the workpiece and the precision of the cut will be impaired.

1. Press cutting (cutting small workpieces)



1. Locking screw

010247

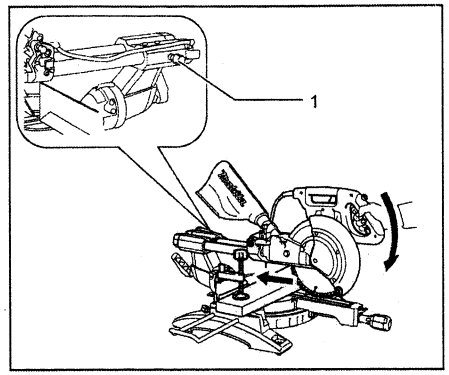
Workpieces up to 91 mm high and 70 mm wide can be cut in the following way.

Push the carriage toward the guide fence fully and tighten the locking screw clockwise to secure the carriage. Secure the workpiece with the vise. Switch on the tool without the blade making any contact and wait until the blade attains full speed before lowering. Then gently lower the handle to the fully lowered position to cut the workpiece. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.

⚠CAUTION:

- Firmly tighten the knob clockwise so that the carriage will not move during operation. Insufficient tightening may cause unexpected kickback of the blade. Possible serious PERSONAL INJURY may result.

2. Slide (push) cutting (cutting wide workpieces)



1. Locking screw

010248

Loosen the locking screw counterclockwise so that the carriage can slide freely. Secure the workpiece with the vise. Pull the carriage toward you fully. Switch on the tool without the blade making any contact and wait until the blade attains full speed. Press down the handle and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE AND THROUGH THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.

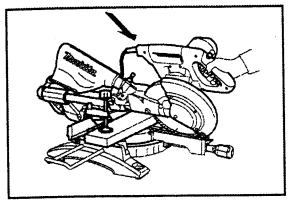
⚠CAUTION:

- Whenever performing the slide cut, FIRST PULL THE CARRIAGE TOWARD YOU FULLY and press down the handle to the fully lowered position, then PUSH THE CARRIAGE TOWARD THE GUIDE FENCE. NEVER START THE CUT WITH THE CARRIAGE NOT FULLY PULLED TOWARD YOU. If you perform the slide cut without pulling the carriage fully or if you perform the slide cut toward your direction, the blade may kickback unexpectedly with the potential to cause serious PERSONAL INJURY.
- Never perform the slide cut with the handle locked in the lowered position by pressing the stopper pin.
- Never loosen the locking screw which secures the carriage while the blade is rotating. This may cause serious injury.

3. Miter cutting

Refer to the previously covered "Adjusting the miter angle".

4. Bevel cut



010249

Loosen the lever and tilt the saw blade to set the bevel angle (Refer to the previously covered "Adjusting the bevel angle"). Be sure to retighten the lever firmly to secure the selected bevel angle safely. Secure the workpiece with a vise. Make sure the carriage is pulled all the way back toward the operator. Switch on the tool without the blade making any contact and wait until the blade attains full speed. Then gently lower the handle to the fully lowered position while applying pressure in parallel with the blade and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE TO CUT THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.

⚠CAUTION:

- Always be sure that the blade will move down to bevel direction during a bevel cut. Keep hands out of path of saw blade.
- During a bevel cut, it may create a condition whereby the piece cut off will come to rest against the side of the blade. If the blade is raised while the blade is still rotating, this piece may be caught by the blade, causing fragments to be scattered which is dangerous. The blade should be raised ONLY after the blade has come to a complete stop.
- When pressing down the handle, apply pressure in parallel with the blade. If a force is applied perpendicularly to the turn base or if the pressure direction is changed during a cut, the precision of the cut will be impaired.
- Always slide the sliding fence so that it does not interfere any part of the carriage when performing bevel cuts.
- Always remove the sub-fence R so that it does not interfere any part of the carriage when performing right bevel cuts.

5. Compound cutting

Compound cutting is the process in which a bevel angle is made at the same time in which a miter angle is being cut on a workpiece. Compound cutting can be performed at angle shown in the table.

Miter angle	Bevel angle
Left and Right 0° - 45°	Left and Right 0° - 45°

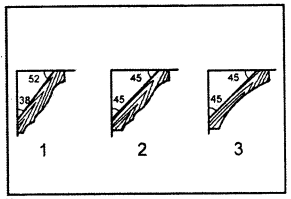
009713

When performing compound cutting, refer to "Press cutting", "Slide cutting", "Miter cutting" and "Bevel cut" explanations.

6. Cutting crown and cove moldings

Crown and cove moldings can be cut on a compound miter saw with the moldings laid flat on the turn base.

There are two common types of crown moldings and one type of cove moldings; 52/38° wall angle crown molding, 45° wall angle crown molding and 45° wall angle cove molding. See illustrations.



1. 52/38° type crown molding
2. 45° type crown molding
3. 45° type cove molding

001555

There are crown and cove molding joints which are made to fit "Inside" 90° corners ((1) and (2) in Fig. A) and "Outside" 90° corners ((3) and (4) in Fig. A).

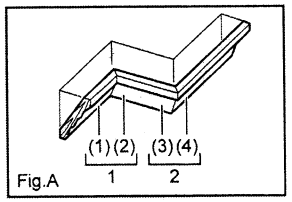
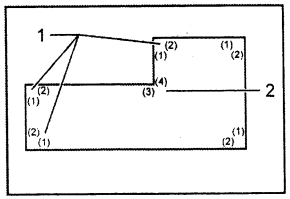


Fig.A

1. Inside corner
2. Outside corner

001556



1. Inside corner
2. Outside corner

001557

Measuring

Measure the wall length and adjust workpiece on table to cut wall contact edge to desired length. Always make sure that cut workpiece length **at the**

back of the workpiece is the same as wall length. Adjust cut length for angle of cut. Always use several pieces for test cuts to check the saw angles. When cutting crown and cove moldings, set the bevel angle and miter angle as indicated in the table (A) and position the moldings on the top surface of the saw base as indicated in the table (B).

In the case of left bevel cut

Table (A)

	Molding position in Fig. A	Bevel angle		Miter angle	
		52/38° type	45° type	52/38° type	45° type
For inside corner	(1)	Left 33.9°	Left 30°	Right 31.6°	Right 35.3°
	(2)			Left 31.6°	Left 35.3°
For outside corner	(3)				
	(4)			Right 31.6°	Right 35.3°

Table (B)

	Molding position in Fig. A	Molding edge against guide fence	Finished piece
For inside corner	(1)	Ceiling contact edge should be against guide fence.	Finished piece will be on the Left side of blade.
	(2)	Wall contact edge should be against guide fence.	
For outside corner	(3)		Finished piece will be on the Right side of blade.
	(4)	Ceiling contact edge should be against guide fence.	

Example:

In the case of cutting 52/38° type crown molding for position (1) in Fig. A:

- Tilt and secure bevel angle setting to 33.9° LEFT.
- Adjust and secure miter angle setting to 31.6° RIGHT.
- Lay crown molding with its broad back (hidden) surface down on the turn base with its CEILING CONTACT EDGE against the guide fence on the saw.
- The finished piece to be used will always be on the LEFT side of the blade after the cut has been made.

In the case of right bevel cut

Table (A)

	Molding position in Fig. A	Bevel angle		Miter angle	
		52/38° type	45° type	52/38° type	45° type
For inside corner	(1)	Right 33.9°	Right 30°	Right 31.6°	Right 35.3°
	(2)			Left 31.6°	Left 35.3°
For outside corner	(3)				
	(4)			Right 31.6°	Right 35.3°

Table (B)

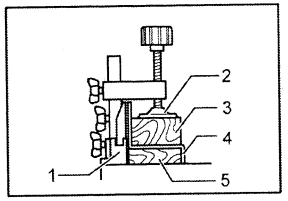
	Molding position in Fig. A	Molding edge against guide fence	Finished piece
For inside corner	(1)	Wall contact edge should be against guide fence.	Finished piece will be on the Right side of blade.
	(2)	Ceiling contact edge should be against guide fence.	
For outside corner	(3)		Finished piece will be on the Left side of blade.
	(4)	Wall contact edge should be against guide fence.	

Example:

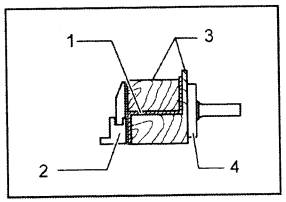
In the case of cutting 52/38° type crown molding for position (1) in Fig. A:

- Tilt and secure bevel angle setting to 33.9° RIGHT.
- Adjust and secure miter angle setting to 31.6° RIGHT.
- Lay crown molding with its broad back (hidden) surface down on the turn base with its WALL CONTACT EDGE against the guide fence on the saw.
- The finished piece to be used will always be on the RIGHT side of the blade after the cut has been made.

7. Cutting aluminum extrusion



1. Guide fence
2. Vise
3. Spacer block
4. Aluminum extrusion
5. Spacer block



1. Aluminum extrusion
2. Guide fence
3. Spacer block
4. Horizontal vise (optional accessory)

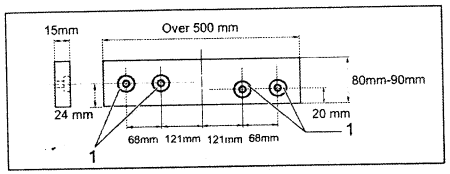
When securing aluminum extrusions, use spacer blocks or pieces of scrap as shown in the figure to prevent deformation of the aluminum. Use a cutting lubricant when cutting the aluminum extrusion to prevent build-up of the aluminum material on the blade.

⚠CAUTION:

- Never attempt to cut thick or round aluminum extrusions. Thick aluminum extrusions may come loose during operation and round aluminum extrusions cannot be secured firmly with this tool.

8. Wood facing

Use of wood facing helps to assure splinter-free cuts in workpieces. Attach a wood facing to the guide fence using the holes in the guide fence.
See the figure concerning the dimensions for a suggested wood facing.

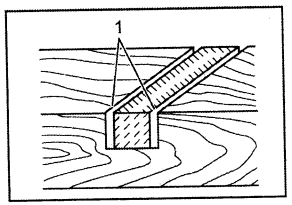


1. Holes

⚠CAUTION:

- Use straight wood of even thickness as the wood facing.
- Use screws to attach the wood facing to the guide fence. The screws should be installed so that the screw heads are below the surface of the wood facing.
- When the wood facing is attached, do not turn the turn base with the handle lowered. The blade and/or the wood facing will be damaged.

9. Groove cutting



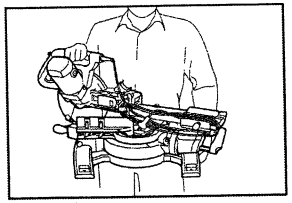
1. Cut grooves with blade

A dado type cut can be made by proceeding as follows:
Adjust the lower limit position of the blade using the adjusting screw and the stopper arm to limit the cutting depth of the blade. Refer to "Stopper arm" section described previously.
After adjusting the lower limit position of the blade, cut parallel grooves across the width of the workpiece using a slide (push) cut as shown in the figure. Then remove the workpiece material between the grooves with a chisel. Do not attempt to perform this type of cut using wide (thick) blades or with a dado blade. Possible loss of control and injury may result.

⚠CAUTION:

- Be sure to return the stopper arm to the original position when performing other than groove cutting.

Carrying tool



Make sure that the tool is unplugged. Secure the blade at 0° bevel angle and the turn base at right miter angle fully. Secure the slide poles after pulling the carriage toward you fully. Lower the handle fully and lock it in the lowered position by pushing in the stopper pin.
Wind the power supply cord using the cord rests.
Carry the tool by holding the tool base as shown in the figure. If you remove the holders, dust bag, etc., you can carry the tool more easily.
Carry the tool by holding both sides of the tool base as shown in the figure. If you remove the holders, dust bag, etc., you can carry the tool more easily.

⚠CAUTION:

- Always secure all moving portions before carrying the tool.
- Stopper pin is for carrying and storage purposes only and not for any cutting operations.

MAINTENANCE

⚠CAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

⚠WARNING:

- Always be sure that the blade is sharp and clean for the best and safest performance.

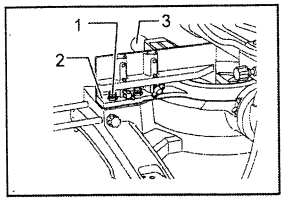
NOTICE:

- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Adjusting the cutting angle

This tool is carefully adjusted and aligned at the factory, but rough handling may have affected the alignment. If your tool is not aligned properly, perform the following:

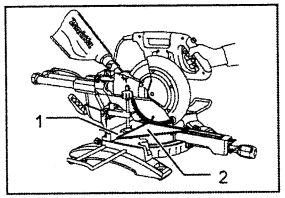
1. Miter angle



1. Hex bolt
2. Guide fence
3. Grip

010410

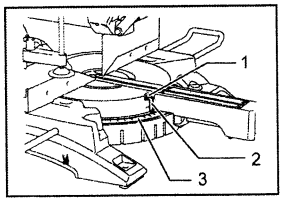
Push the carriage toward the guide fence and tighten the locking screw to secure the carriage. Loosen the grip which secures the turn base. Turn the turn base so that the pointer points to 0° on the miter scale. Then turn the turn base slightly clockwise and counterclockwise to seat the turn base in the 0° miter notch. (Leave as it is if the pointer does not point to 0°.) Loosen the hex sockets bolts securing the guide fence using the socket wrench.



1. Guide fence
2. Triangular rule

010252

Lower the handle fully and lock it in the lowered position by pushing in the stopper pin. Square the side of the blade with the face of the guide fence using a triangular rule, try-square, etc. Then securely tighten the hex socket bolts on the guide fence in the order from the right side.



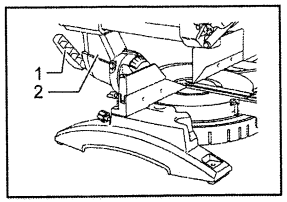
1. Screw
2. Pointer
3. Miter scale

010253

Make sure that the pointer points to 0° on the miter scale. If the pointer does not point to 0°, loosen the screw which secures the pointer and adjust the pointer so that it will point to 0°.

2. Bevel angle

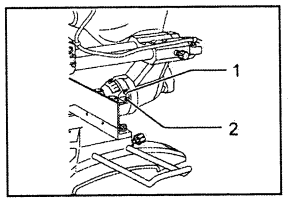
(1) 0° bevel angle



1. Lever
2. Arm

010411

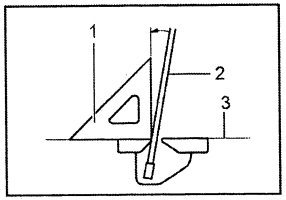
Push the carriage toward the guide fence and tighten the locking screw to secure the carriage. Lower the handle fully and lock it in the lowered position by pushing in the stopper pin. Loosen the lever at the rear of the tool.



1. 0° bevel angle adjusting bolt
2. Left 45° bevel angle adjusting bolt

010476

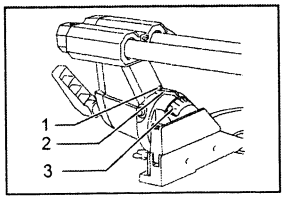
Turn the hex bolt on the right side of the arm two or three revolutions counterclockwise to tilt the blade to the right.



1. Triangular rule
2. Saw blade
3. Top surface of turn table

010819

Carefully square the side of the blade with the top surface of the turn base using the triangular rule, try-square, etc. by turning the hex bolt on the right side of the arm clockwise. Then tighten the lever securely.

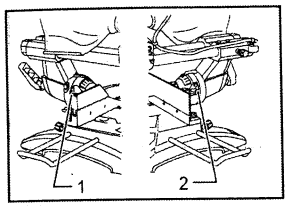


1. Screw
2. Pointer
3. Bevel scale

010251

Make sure that the pointer on the arm point to 0° on the bevel scale on the arm holder. If they do not point to 0°, loosen the screw which secure the pointer and adjust it so that it will point to 0°.

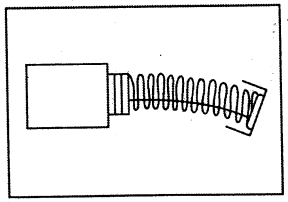
(2) 45° bevel angle



1. Right 45° bevel angle adjusting bolt
2. Left 45° bevel angle adjusting bolt

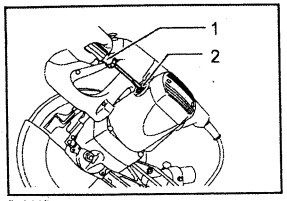
010483

Adjust the 45° bevel angle only after performing 0° bevel angle adjustment. To adjust left 45° bevel angle, loosen the lever and tilt the blade to the left fully. Make sure that the pointer on the arm points to 45° on the bevel scale on the arm holder. If the pointer does not point to 45°, turn the 45° bevel angle adjusting bolt on the right side of the arm holder until the pointer points to 45°. To adjust the right 45° bevel angle, perform the same procedure as that described above.



007234

Remove and check the carbon brushes regularly. Replace when they wear down to 3 mm in length. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



1. Screwdriver
2. Brush holder cap

010412

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

After use

- After use, wipe off chips and dust adhering to the tool with a cloth or the like. Keep the blade guard clean according to the directions in the previously covered section titled "Blade guard". Lubricate the sliding portions with machine oil to prevent rust.
- When storing the tool, pull the carriage toward you fully.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

ACCESSORIES

⚠CAUTION:

- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Steel & Carbide-tipped saw blades

Miter saw blades	For smooth and precise cutting in various materials.
Combination	General purpose blade for fast and smooth rip, crosscuts and miters.
Crosscutting	For smoother cross grain cuts. Slices cleanly against the grain.
Fine cross cuts	For sand-free cuts cleanly against the grain.
Non-ferrous metals miter saw blades	For miters in aluminum, copper, brass, tubing, and other non-ferrous metals.

006528

- Sub-fence R
- Vise assembly (Horizontal vise)
- Vertical vise
- Socket wrench with hex wrench on its other end
- Holder
- Dust bag
- Elbow
- Triangular rule